

ABSTRACT OF THE DISCLOSURE

A method and apparatus for classifying a plurality of elements in images, where electronic images of a field of view containing elements are formed. Each of the elements has a plurality of features. A first subgroup of the plurality of features from the images of the plurality of elements are extracted and processed to segregate the plurality of elements into first and second groups. A classification class only for each of the elements in the first group is determined by selecting and processing a second subgroup of the extracted features to determine a physical characteristic of the element, and by selecting and processing a third subgroup of the extracted features in response to the determined physical characteristic to determine a classification class of the element. The second group of elements bypasses the determination of classification class.

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